PRELIMINARY ASSESSMENT
of the
OHIO OIL COMPANY
(EPA ID # ~~not yet assigned~~) OK000 198 1349

located in
BRISTOW, CREEK COUNTY, OKLAHOMA 74010

STATE OF OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

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I. Introduction

The State of Oklahoma Department of Environmental Quality (DEQ) is tasked by the U.S. Environmental Protection Agency (EPA), as authorized by CERCLA and as amended by SARA, under the Multi-Site Cooperative Agreement (CA # V-006465-01-Q) to conduct a Preliminary Assessment (PA) of the Ohio Oil Company site, (CERCLIS ID # not yet assigned). The primary purpose of this PA is to assess the immediate or potential threat of wastes at the site that may impact public and environmental health and to collect information sufficient to support a decision regarding the need for further action under CERCLA/SARA. The scope of this investigation includes the review of available information from DEQ and other State agencies' files, a comprehensive target survey, and a site reconnaissance.

II. Site Description, Operational History, and Waste Characteristics

Site Description

The area originally identified during the CERCLIS Universe Investigations Project as the Lorraine Refining Company site is located in the N2 NW4 NW4 Section 29 T16N R9E IM, Creek County, Oklahoma, along the west side of the St. Louis and San Francisco railroad right of way and situated about 0.7 mile northeast of the Bristow City Hall (Reference 1). After a meticulous search of available historical documents and aerial photographs, it was concluded that the Lorraine Refining Company operated an oil refinery on land located southwest of the area of interest of this project and has already been described and studied in a PA and Site Inspection (SI) of the Wilcox Oil Company site (CERCLIS ID# OK0001056324) (References 2, 3, 4, 5). The rest of the former oil facility described in the Potential Hazardous Waste Site Identification (EPA Form 2070-8) (Reference 1) never belonged to the Lorraine Refining Company but was part of the Ohio Oil Company refinery (Reference 2). Records from the Creek County Clerk's office and Sanborn Fire Insurance Maps indicate that area of interest is located in: NE4 SW4; NW4 SE4; and E2 NW4 SW4, all in Section 20, T16N R9E IM, and all of that portion of the northwest corner of the SE4 SW4 of Section 20, lying northwest of the St. Louis & San Francisco Railroad's right of way, containing in all approximately 101 acres (Reference 2, Figure 1). Coordinates of the site are 35° 50' 52.86" north latitude and 96° 22' 45.85" west longitude (Reference 6).

There are four residences and an eight unit apartment building on site; four residences are within 200 feet of the site; and 11 are within one-quarter mile (Reference 7, Figure 2). There are three old refinery buildings on the site which appeared to be occupied by businesses (Reference 7, Figure 2). There are no schools or day-care centers within 200 feet of the site (Reference 7). The majority of the site is covered by grass, shrubs, and trees, but there are two areas of asphalt-like waste in the portion of the site formerly occupied by the refinery's tank farm and a waste pit near the railroad (Reference 7, Figure 2). The remaining structures from the former refinery plant and tank farm include former refinery buildings, concrete pads, tank berms, and old tank foundations (Reference 7, Figure 2). There are two fresh water ponds on the site (Reference 7). The pond which is located

on (b) (6) property used to be the refinery's cooling pond. The pond is currently used for fishing. A small south trending intermittent stream is fed by this pond (Reference 7, Figure 2). Three areas of standing water with what appeared to be wetland vegetation growing in and around it were observed during the site visit. These observed wetlands, which were not indicated on the area wetland map, are estimated to cover 35,400 sq. feet or 0.8 acre (Reference 7).

Operational History

A detailed title search indicates that on January 3, 1917, an Assignment of Oil and Gas Lease was signed between Continental Refining Company and Yarma Harjo (Reference 2). Based on Sanborn Fire Insurance Maps and Creek County Records it was determined that following companies owned the refinery after 1917: Transcontinental Oil Company (1917 - 1923), Marathon Oil Company (1923 - 1936), and Ohio Oil Company (1936 - 1942) (Reference 2). On October 16, 1942, the site was acquired by the Sonken-Galamba Supply Company and then divided among several parties (Reference 2). A 1923 Sanborn Fire Insurance Map shows the various components of the refinery while it was owned by the Marathon Oil Company (Reference 2). An aerial photograph dated 1941, shows that all the 50,000 barrel storage tanks were already removed by 1941 (Reference 3). It is unknown what type of activities were maintained on the site after Ohio Oil Company ceased its oil-related activities on the site.

Records from the Creek County Tax Assessor's office indicate that the current owners of the site are: (b) (6)
Falcon Oil Properties; U. S. Cellular Telephone Corp.; and (b) (6) (Reference 2). DEQ received permission from all property owners to conduct a site reconnaissance (Reference 8). An on site reconnaissance was conducted by DEQ on March 10, 1997 (Reference 7). There are no existing complaints regarding the site in the Creek County DEQ files (Reference 7).

Waste Characteristics

Old foundations and buildings which belonged to the refinery are on the site (Reference 7). Two of the former tank berms contain asphalt-like waste which may be tank bottom sediment from the 50,000 barrel storage tanks once present on site. The total area covered by the asphalt-like waste is estimated at about 13,200 sq. feet (0.3 acre) (Reference 7). A waste pit is located on the central portion of the site just west of the railroad. The dimensions of the waste pit approximately are 450' x 60' x 0.5' or 13,500 cubic feet (Reference 7).

As indicated in the 1959 soil survey, the land was impacted by oil exploration waste (Reference 9). This classification corresponds to miscellaneous land types which are defined as gullied and eroded and almost bare of vegetation (Reference 9). Currently, the site is well vegetated (Reference 7). The wastes assumed to be associated with this type of facility include crude oil, tank residues, brine, acid and caustic sludges, heavy metals, petroleum products, coke, sulphur compounds, and solvents.

III. Pathway and Environmental Hazard Assessment

Groundwater

According to the Creek County Soil Survey, the site overlies the Sandy Soils of Forested Areas Association characterized by its susceptibleness to leaching (Reference 9, p. 8-9). Strongly sloping Darnell and Pottsville soils and sloping Stephenville and Darnell fine sandy loams form part of the Sandy Soils of Forested Areas Association, which covers the area of interest (Reference 9, Sheet # 59).

Strongly sloping (12 to 20 percent slopes) Darnell and Pottsville soils cover the central and southcentral areas of the site (Reference 9, Sheet # 59, p. 15-16). These soils developed over reddish sandstones under the cover of forest and consists of very shallow, more or less sandy and stony, acid soils that overlie slightly acid to neutral, reddish or yellowish, interbedded sandstone, silty or sandy shale, and shale (Reference 9, p. 15). Many fragments of sandstone, ranging up to 2 or 3 feet in diameter, lie on the surface, and there are many outcrops of sandstone bedrock (Reference 9, p. 16). Surface drainage is rapid. Internal drainage is moderate in the Darnell soils, but it is very slow in the Pottsville soils (Reference 9, p. 15). The soil profile is less than 8 inches thick, except in scattered pockets between stone fragments or outcrops where it may be as much as 12 or 15 inches thick (Reference 9, p. 16). This land is unsuitable for any agricultural use (Reference 9, p. 16).

The soil survey indicates that the eastern portion of the site is covered by Stephenville and Darnell fine sandy loams with 4 to 7 percent slopes (Reference 9, Sheet # 59, p. 24). These shallow to moderately deep upland soils developed over reddish-yellow to red sandstone or interbedded sandstone and sandy shale (Reference 9, p. 24). Both soils are well drained (Reference 9, p. 24). Runoff is slow to moderate, but internal drainage is moderate to rapid (Reference 9, p. 24). The two soils are similar in surface appearance, but the Stephenville soils are 20 to 36 inches deep and the Darnell soils are 5 to 20 inches deep over sandstone (Reference 9, p. 23). This land is not well suited to crops (Reference 9, p. 24).

The soil survey has mapped the western portion of the site and all the bermed areas as oil-waste land, indicating contamination at the surface soil (Reference 9, Sheet # 59, p. 21).

The Barnsdall Formation, which is a part of the Vamoosa-Ada aquifer in the study area, outcrops at the Ohio Oil Company refinery site and potentially receives groundwater recharge from downward infiltration of precipitation falling on the ground surface (Reference 10). The Barnsdall Formation is a bedrock aquifer but is not considered to be a Principal Ground Water Resource by the Oklahoma State Department of Health (Reference 10). Alluvial deposits of the Sand and Little Deep Fork Creeks are present to the south of the site within the area of interest and considered to be a Principal Ground Water Resource by the Oklahoma State Department of Health (References 10).

The alluvial deposits consist of wedge shaped layers of sand, silt, clay, and gravel. These deposits range from 0 to 100 feet in thickness (Reference 10). In the study area, the Vamoosa-Ada aquifer is

comprised of, in ascending order, the uppermost part of the Barnsdall Formation, the Tallant Formation, the Vamoosa Group, the Ada Group, and the lower part of the Vanoss Group (Reference 10). The Barnsdall Formation is approximately 200 feet thick under the site and consists of massive to thin beds of coarse to fine grain sandstone, irregularly interbedded with sandy to silty shale (Reference 10). The Vamoosa-Ada strata outcrop is predominantly composed of red and brown, coarse to fine grain, well sorted sandstones interbedded with dark red sandy to silty shale (Reference 10).

The upper part of the Barnsdall Formation and the alluvial aquifer are unconfined, with a shallow water table, and are very susceptible to groundwater contamination by potential wastes or contaminated soils at the site (Reference 10). Depth to the shallowest water bearing formation is less than 25 feet (Reference 10). The regional groundwater flow direction is from west to east, as is surface drainage. However, locally the shallow groundwater flows in various directions to points of discharge into surface water bodies, such as rivers, creeks, lakes, and ponds (Reference 10). At the site, it is probably flowing toward the south to southeast, discharging into Sand Creek and its tributaries nearby (Reference 10). Impacted groundwater discharging into a creek may serve as source of surface water pollution.

The nearest water well, which is a 125 feet deep domestic well, is located on site (Reference 11, Figure 3). The total population served by private wells is described in the table below. The numbers were arrived at by multiplying the number of wells by the estimated average number of persons (2.68) within each household in Creek County (References 11, 12, 13).

Private Wells

Distance from Site (mi)	# of Wells	Est. Population Served by Private Wells
On-site	1	2.68
0 - 1/4	3	8.04
1/4 - 1/2	1	2.68
1/2 - 1	6	16.08
1 - 2	24	64.32
2 - 3	23	61.64
3 - 4	27	72.36
Total	**85**	**227.8**

The City of Bristow obtains its water supply solely from wells within the four mile study area (Reference 14, Figure 3). These wells are screened in the Vamoosa-Ada aquifer (Reference 14). There are eight active public water wells within the study area that make up the City of Bristow Municipal Water System (References 14, 15, 16, Figure 3). Bristow obtains its water supply solely from wells that are within the study area (References 4, 14, 15, 16). Two municipal wells (Wells # 14 and 16) are located about one and one-quarter mile south and southwest of the site (Reference 14, Figure 3). They were approximately 200 feet deep and produced from the Barnsdall Formation (References 4, 14). The nearest active municipal well (Well # 14) is located less than one and one-quarter mile southwest of the site (Reference 14, Figure 3). There are five water storage towers within the distribution system (Reference 17). There are only three municipal wells [two large capacity wells (200 gpm) and one small capacity well (50 - 90 gpm)] pumping simultaneously during any given 24 hour period (References 4, 18). Under this scheme, one well provides more than forty percent of the daily water supply but not more than forty percent of the total annual production (References 4, 17, 18). The population served by each well is apportioned according to the estimated annual production capacities of the individual wells (References 17, 18). Wells # 14, 16, 17, 19, 20, 22, 23 are located in the one to two mile radius zone and the Well # 18 is located in the two to three mile zone (Reference 14). Thus, the apportioned population served by Well #18 is located in the two to three mile radius zone, while the rest of the population is placed in the one to two mile zone. A population fraction served by Well # 18 is 6.73% or 300.7 people (Reference 18). The 119 residents of the Slick Rural Water Association also obtain their water supply from Bristow (References 4, 18). A public well (Well # 1) in the two to three mile radius zone serves the 50 residents of the Evergreen Trailer Park (References 4, 15). The total population served by the municipal wells is 4,469 people (4,300 from Bristow, 119 from Slick, 50 people from the Evergreen Trailer Park) and is described in the table below (References 17, 18).

Public Wells

Distance from Site (mi)	# of Wells	Est. Population Served by Public Wells
On-site	0	0
0 - 1/4	0	0
1/4 - 1/2	0	0
1/2 - 1	0	0
1 - 2	7	4119
2 - 3	2	350
3 - 4	0	0
Total	**9**	**4469**

As a result of historical practices at the site, a release of hazardous substances from the Ohio Oil Company refinery site to the groundwater is suspected. The private domestic wells located outside the city limits of Bristow are assumed to be drinking water wells. Those wells close to the site which produce from the shallow ground water are at considerable risk of contamination, as are the wells on the (b) (6) adjoining property. The nearest domestic well which utilizes shallow ground water for drinking purposes is located on site, and the population served by the well is considered primary targets. Another well, located just north of the site, utilizes shallow ground water for drinking purposes (Reference 11), and the population served by the well is also considered primary targets. Because the other wells in the study area are located at greater distance from the site, they are considered secondary targets. The population served by public wells are also considered secondary targets due to the distance and directions of the wells from the site. There are no Well Head Protection Areas within a four mile radius of the site (Reference 19). No rural water system is in the area of interest (Reference 20). There is no indication that the site is located in an area of karst terrain (Reference 10). There are no faults mapped at the site (Reference 10).

Surface Water

The topography in the vicinity of site slopes to the south (Reference 7, Figure 1). Surface water runoff would follow the topography in the vicinity of the site (Reference 7, Figure 1). There are two fresh water ponds on the site (Reference 7). The pond located on (b) (6) property used to be the refinery's cooling pond. The pond is currently used for fishing. A small tributary of Sand Creek originates from the pond and flows south until it meets Sand Creek (Reference 7, Figures 1, 4). The probable point of entry (PPE) into Sand Creek is one half mile south of the site and occurs in the SE4 NW4 NW4 of Section 29 T16N R9E IM in Creek County (Reference 21, Figures 1, 4). Sand Creek, which flows west and then south from the site, is a small, perennial tributary of the Little Deep Fork Creek and flows southeasterly until it enters the Little Deep Fork about 3.5 miles downstream from the PPE (Reference 21, Figure 4). The 15 mile target distance ends in the Little Deep Fork Creek just south of Slick, within Section 20 T15N R10E IM of the same county (Reference 21, Figure 4). The nearest gaging station is located on the Deep Fork River over 30 miles away from the Sand Creek and can not be considered representative of the flow rate of Sand Creek and Little Deep Fork Creek (Reference 22). The annual flow rate of Sand Creek is unknown. However, upon visual confirmation during the site reconnaissance, it is estimated that the Sand Creek qualifies as a small to moderate stream. However, the creek, which is shown as a perennial stream on the topographic map (Reference 21), may not flow at times during the dry summer months (Reference 4).

The normal annual precipitation in the region of the site is about 37.19 inches per year (Reference 9). The site is located outside the 100 year flood hazard area (Reference 23). There are no drinking water intakes associated with the surface water pathway (Reference 24).

Sand Creek is considered by the State of Oklahoma to be a "habitat limited aquatic community" subcategory of the fish and wildlife propagation beneficial use category and within the "secondary body contact" category of the recreational beneficial use (Reference 25). "Habitat limited aquatic community" means a subcategory of the beneficial use 'Fish and Wildlife Propagation" category where the water chemistry and habitat are not adequate to support a 'Warm Water Aquatic Community" (Reference 25). The Little Deep Fork Creek is considered a "warm water aquatic community" subcategory of the fish and wildlife propagation beneficial use and within the "primary body contact" subcategory for recreational beneficial use category (Reference 25). "Warm Water aquatic community" means a subcategory of the beneficial use category 'Fish and Wildlife Propagation" where the water quality and habitat are not adequate to support intolerant climax fish communities and includes an environment suitable for the full range of warm water benthos (Reference 25).

Habitats of the endangered and threatened species listed below are known to occur in Creek County (Reference 26).

Species	Federal Status
Bald Eagle	Threatened
Interior least tern	Endangered
Peregrine falcon	Endangered
Piping plover	Threatened
Cerulean warbler	Category 2 Candidate
Loggerhead shrike	Category 2 Candidate
Prairie mole cricket	Category 2 Candidate
Arkansas River speckled chub	Category 2 Candidate
Texas horned lizard	Category 2 Candidate
Western Snowy plover	Category 2 Candidate
Fissa sedge (Carex fissa)	Category 2 Candidate

The Oklahoma Natural Heritage Inventory has no records of sightings of rare species on site, within a four mile radius of the site, or within 15 miles downstream of the site (Reference 27). Therefore, since no sightings have been observed or reported, all species listed above are considered secondary targets.

There are about 30 miles of wetland frontage associated with the 15 mile target distance (Reference 28). The nearby Sand Creek and Little Deep Fork Creek have a potential for contamination from the site. In fact, a south trending intermittent stream was sampled near a county road, about one-quarter mile south of the site during the Wilcox Oil Company ESI, which was conducted by Roy F. Weston, Inc., on November 18-20, 1996. The laboratory results show elevated levels (more than 3 times above background) of copper, zinc, lead, and magnesium (Reference 5).

Soil Exposure

There are about 13,200 sq. feet (0.3 acre) of asphalt-like waste on site (Reference 7). There is a waste pit on site with the estimated dimensions 450' x 60' x 0.5' or 13,500 cubic feet (Reference 7). There are about 32 people (four residences and an eight unit apartment building) living on site; 10 people (four residences) living within 200 feet of the site; and 29 people (11 residences) living within one-quarter mile (Reference 7). These figures are based on a house count taken during the site reconnaissance, multiplying the number of houses by the average number of persons (2.68) per household in Creek County (References 7, 13). There are three old refinery buildings on the site which appeared to be occupied by businesses (Reference 7, Figure 2). By counting the number of parked cars it was estimated that about 12 workers are employed by these businesses and are working on the site (Reference 7). These people are considered to be primary targets. The estimated total population within 1 mile of the site is 600 people (References 7, 29). These figures are based on a house count taken during the site reconnaissance, multiplying the number of houses by the average number of persons (2.68) per household in Creek County (References 7, 13), and the Topologically Integrated Geographic Encoding and Referencing (TIGER) files (Reference 29). There are no schools or day-care centers within 200 feet of the site (Reference 7). The Oklahoma Natural Heritage Inventory has no records of sightings of rare species on site, within a four mile radius of the site, or 15 miles downstream of the site (Reference 27).

Air

Due to the former refinery operations at the site and the volatile organics and potentially contaminated particulate matter associated with petroleum refining, it is assumed that there is a potential for a release of contaminants to the air from the site. The prevailing wind directions are from the north during December through February and from the south during the rest of the year (Reference 9). The 32 people living on site and the 12 workers on site are considered the nearest individuals (Reference 7). There are 10 people living within 200 feet of the site and 29 people living within one-quarter mile (Reference 7). Habitats of the endangered and threatened species listed under the surface water pathway are considered secondary targets (Reference 26). The estimated population and wetland acreage within the four mile radius of the site is described in the table below (References 7, 28, 29). The workers on site and the residents within one-quarter mile are considered primary targets for the air pathway; all other targets mentioned above are considered secondary.

Distance from Site (mi)	Est. Population	Est. Wetland Acreage
On-site	32	4.3
0 - 1/4	39	2
1/4 - 1/2	73	5
1/2 - 1	456	11
1 - 2	3,824	85
2 - 3	802	160
3 - 4	618	125
Total	**5,844**	**392.3**

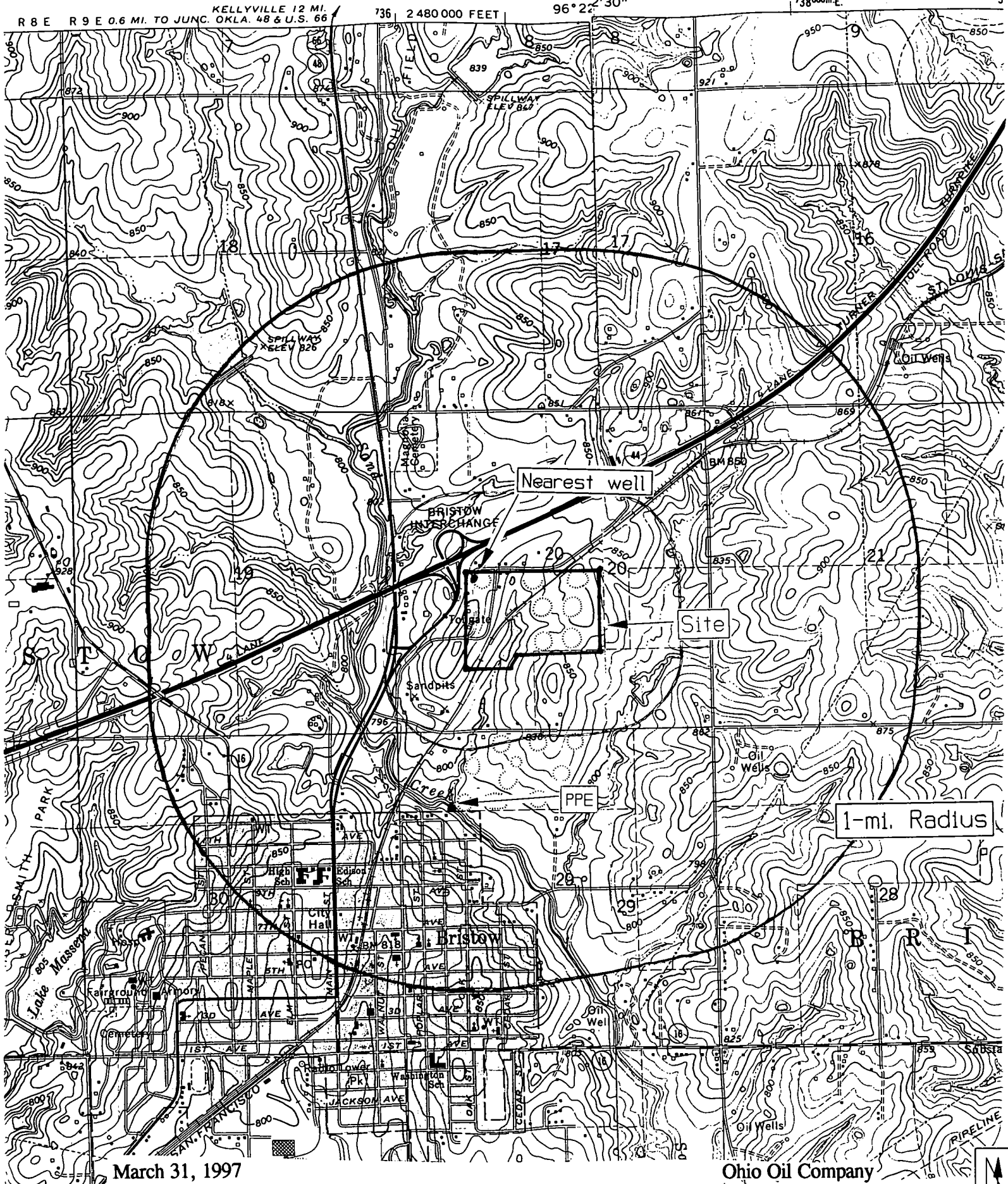
IV. Summary and Conclusion

The refinery, under all owners, was operated outside of the City of Bristow in Creek County, Oklahoma, for an estimated period of 25 years. As a result of this practice, groundwater at the site may be adversely affected by potentially hazardous substances associated with the site. Two residences are considered to be primary targets for the groundwater pathway. The rest of the private wells within the study area are located at relatively safe distances from the site, therefore, the residences served by these wells are considered secondary targets. The population served by public wells are also considered secondary targets due to the distance between the wells and the site.

Sand Creek receives suspected contaminated runoff from the site so the associated wetlands are primary targets. The habitats of threatened or endangered species and the warm water aquatic community "fishery" of the Little Deep Fork Creek are considered secondary targets. There are two areas with asphalt-like waste and a waste pit on the site. An air release is suspected due to the former refinery operations, and the residents and workers on site and residents within one-quarter mile are considered primary targets for the soil and air pathways. Considering the fact that there are primary targets associated with the groundwater, air, surface water, and soil pathways, a Site Inspection is recommended to better characterize the site and to determine whether threats to human health and the environment may exist at the site.

V. Figures

Figure 1: Vicinity Map



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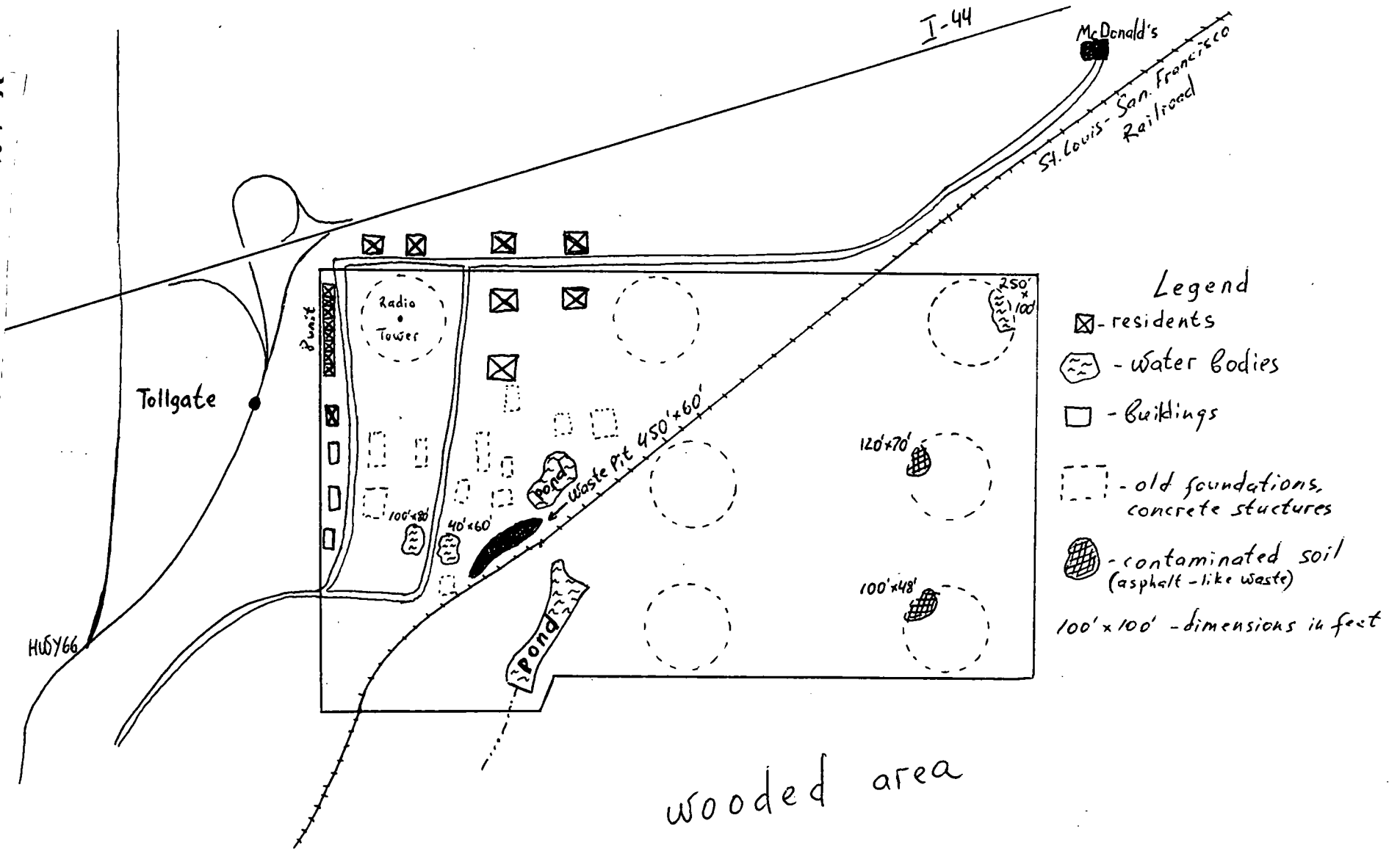
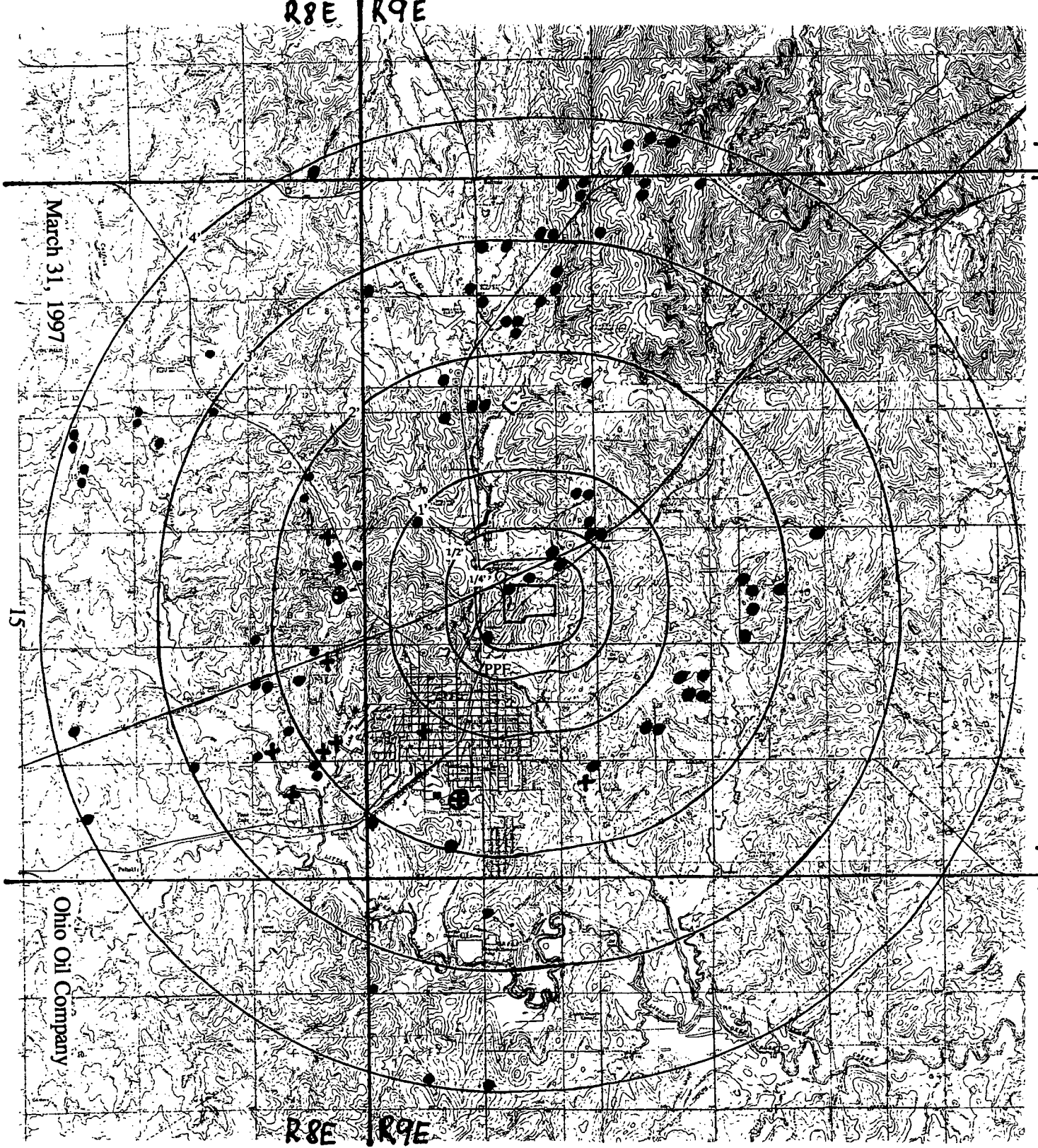


Figure 2: Site Map



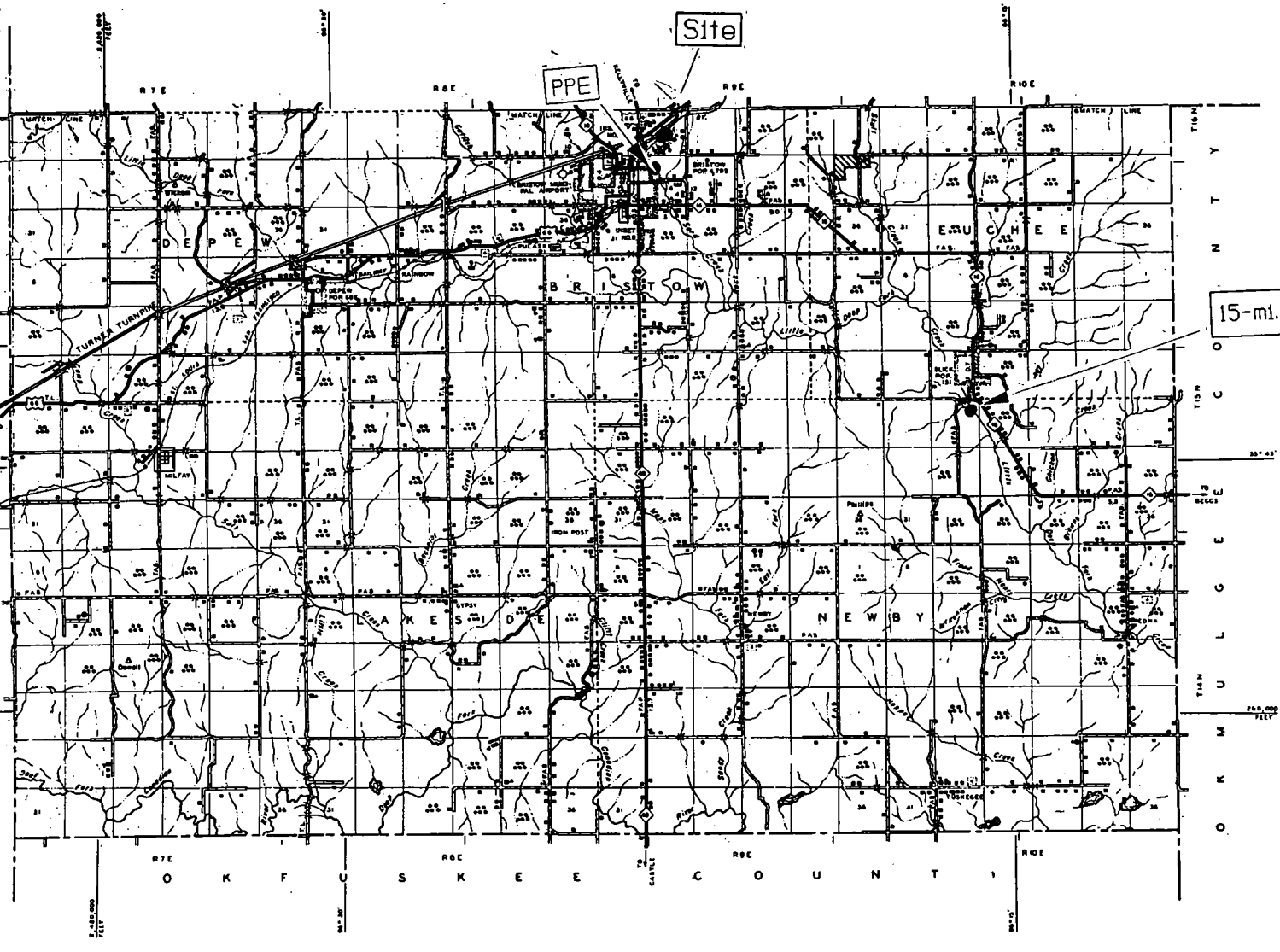
Legend

+ - municipal wells
• - domestic wells
⊕ - abandoned municipal wells

Figure 3: Well Location Map

Not To Scale

Figure 4: Surface Water Migration Route



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Ohio Oil Company

VI. Photodocumentation

Photographer: Scott Stegmann
Date: March 10, 1997

Witness: Karen Khalafian
Direction: Looking northwest

Comments: Photograph # 1 (matches slide # 6). This photo shows (b) (6) pond and the origin of the south trending intermittent stream.

Photographer: Scott Stegmann
Date: March 10, 1997

Witness: Karen Khalafian
Direction: Looking south

Comments: Photograph # 2 (matches slide # 7). This photo shows an area of asphalt-like waste in a bermed area on (b) (6) property.

Photographer: Scott Stegmann
Date: March 10, 1997

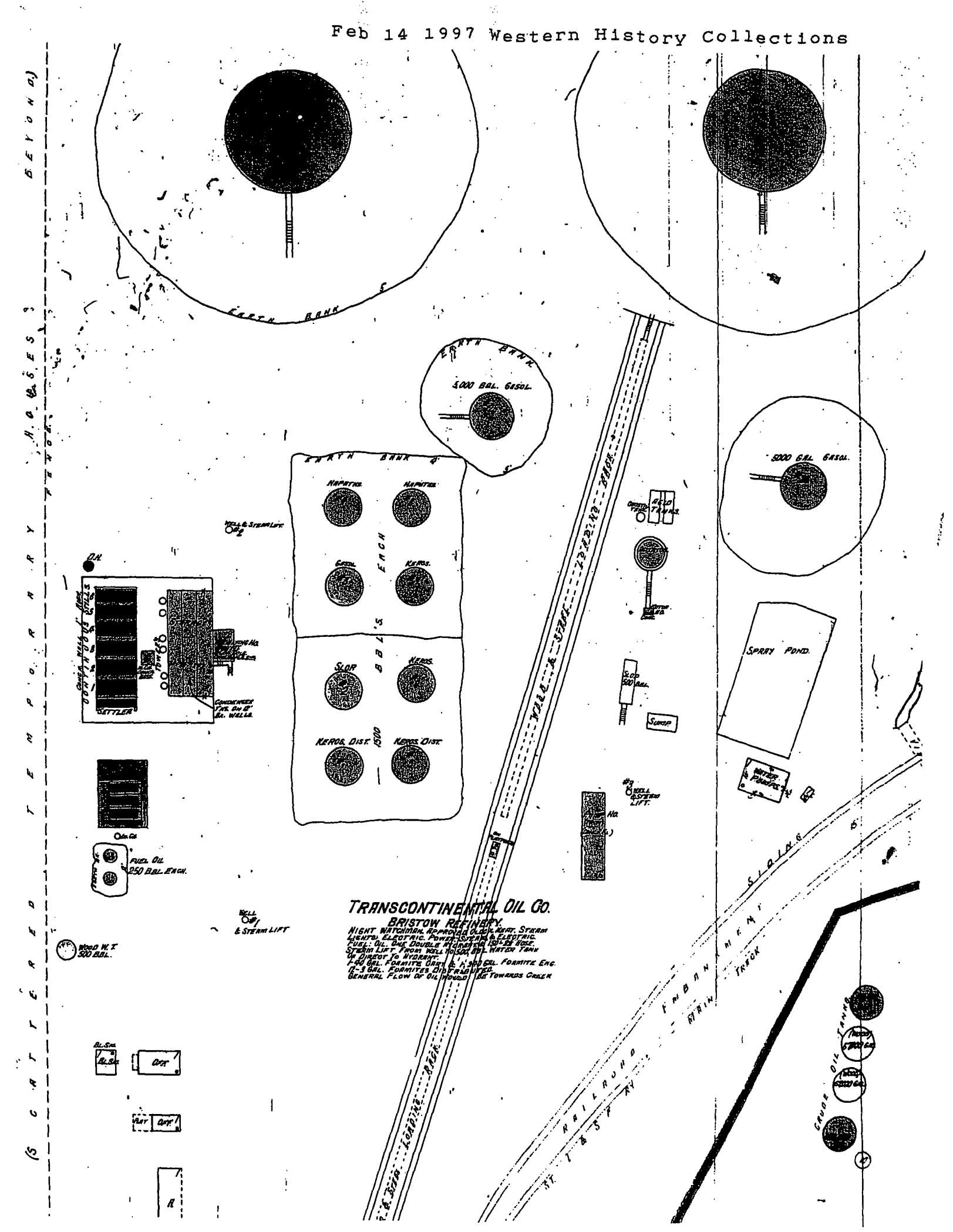
Witness: Karen Khalafian
Direction: Looking southwest

Comments: Photograph # 3 (matches slide # 13). This photo shows asphalt-like material in the waste pit near the railroad.

Photographer: Scott Stegmann
Date: March 10, 1997

Witness: Karen Khalafian
Direction: Looking southeast

Comments: Photograph # 4 (matches slide # 17). This photo shows the residence on site.



VII. List of References

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VIII. References

REFERENCE 1

POTENTIAL HAZARDOUS WASTE SITE IDENTIFICATION

REGION	SITE NUMBER
VI	

NOTE: The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous waste problem actually exists.

A. SITE NAME	B. STREET (or other identifier)		
Lorraine Refining Co.	NE of Bristow		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Bristow	OK		Creek

G. OWNER/OPERATOR (If known)

1. NAME	2. TELEPHONE NUMBER
unknown	

H. TYPE OF OWNERSHIP (If known)

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☐ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION

The site is located in a mostly rural area. There is an intermittent stream flowing from the pond on southern direction on the site. The confluence of this unnamed stream and Sand Creek occured on the southcentral portion of the Wilcox Refining Company site. There are about 9 residences and 8-unit apartment building on the site.

J. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.)	K. DATE IDENTIFIED (mo., day, & yr.)
CERCLIS Universe Investigation Project	11-06-96

L. SUMMARY OF POTENTIAL OR KNOWN PROBLEM

Lorraine Refining Company operated a refinery at this site, and refinery related waste may be on site. There are some old foundations and barren spots on the site, and no information about the refinery related equipment and other remains which might be still presented on the site. As a result, a potential for release of hazardous substances may exists on the site.

M. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Hal Cantwell Karen Khalafian	(405) 271-7158 (405) 271-7137	11-06-96

EPA Form 2070-8 (5-80)

qf
KK
11-06-96

ODEQ CERCLIS UNIVERSE INVESTIGATIONS PROJECT CHECKLIST

Site Name: Lorraine Refining Company

Site Location:
Address NE of Bristow
City Bristow
County Creek
Legal N½ of NW of Sec 29 T16N R9E IM

Site Status:
Active ___ (if active, enter number of workers seen ___)
Inactive V

Site Description:
Is waste evident (y/n) Y, if so circle type(s) below -
pile(s) surface water impoundment(s)
(contaminated soil(s)) drum(s) tank(s)
other ___

What other important structures not associated with the above waste(s) are seen onsite? old refinery related foundations

Setting:
(check all that apply)
Rural V or Urban ___
Industrial/Commercial ___
Agricultural ___
Residential V

ODEQ CERCLIS UNIVERSE INVESTIGATIONS PROJECT CHECKLIST -cont-

Targets: (circle all that are nearby the site, i.e. within a ¼ mile)

(Residence(s)) Daycare center(s) School(s)

Wetland(s) (Stream(s)) Lake(s) Worker(s)

(Pond(s)) Municipal well(s) Private well(s)

Endangered and/or threatened species Park(s)

Other _____

_____

Additional Comments: The site appears to be the location of the old refinery containing some old foundations and barren spots. The site is located just NW of Wilcox Ref. Co. Site.

Attachments: Photodocumentation

Other _____

REFERENCE 2

MEMORANDUM

February 19, 1997

To: Ohio Oil Company (Lorraine Refinery) Preliminary Assessment (PA) file

From: Karen Khalafian, Site Assessment Unit, WMD

Re: Potentially Responsible Party (PRP) Search and Current Ownership of the property

A PRP search was conducted at the Creek County Courthouse on February 3, 1997, concerning an old oil facility located in the Section 20 T16N R9E IM in Creek County, Oklahoma.

After a meticulous search of available historical documents it was concluded that the Lorraine Refinery operated an oil facility on land located southwest of the area of interest and has already been described and studied in a PA and following SI of Wilcox Oil Company (CERCLIS ID# OK0001056324).

Records from the Creek County Clerk's office and Sanborn Fire Insurance Maps indicate that area of interest has following legal descriptions: NE4 of SW4; NW4 of SE4; and E2 of NW4 of SW4, all in Section 20, Township 16 North, Range 9 East, and all of that certain triangular piece of land, lying in the northwest corner of SE4 of SW4 of Section 20, being all of that portion of the SE4 of SW4 of Section 20, lying northwest of the St. Louis & San Francisco Railroad's right of way, containing in all approximately 101 acres. After a detailed title search concerning the site ownership back to January 3, 1917, when an Assignment of Oil and Gas Lease was signed between Continental Refining Company and Yarma Harjo, Full Blood Creek, it was concluded that Transcontinental Oil Company (1917.- 1923), Marathon Oil Company (1923 - 1936), and Ohio Oil Company (1936 - 1942) operated the oil facility. On October 16, 1942, the site was acquired by Sonken-Galamba Supply Company and soon was divided among several parties. It is unknown what kind of operations were maintained on the site after Ohio Oil Company ceased the oil-related activities on the site.

Records from the Creek County Tax Assessor's office indicate that the current owners of the site are:

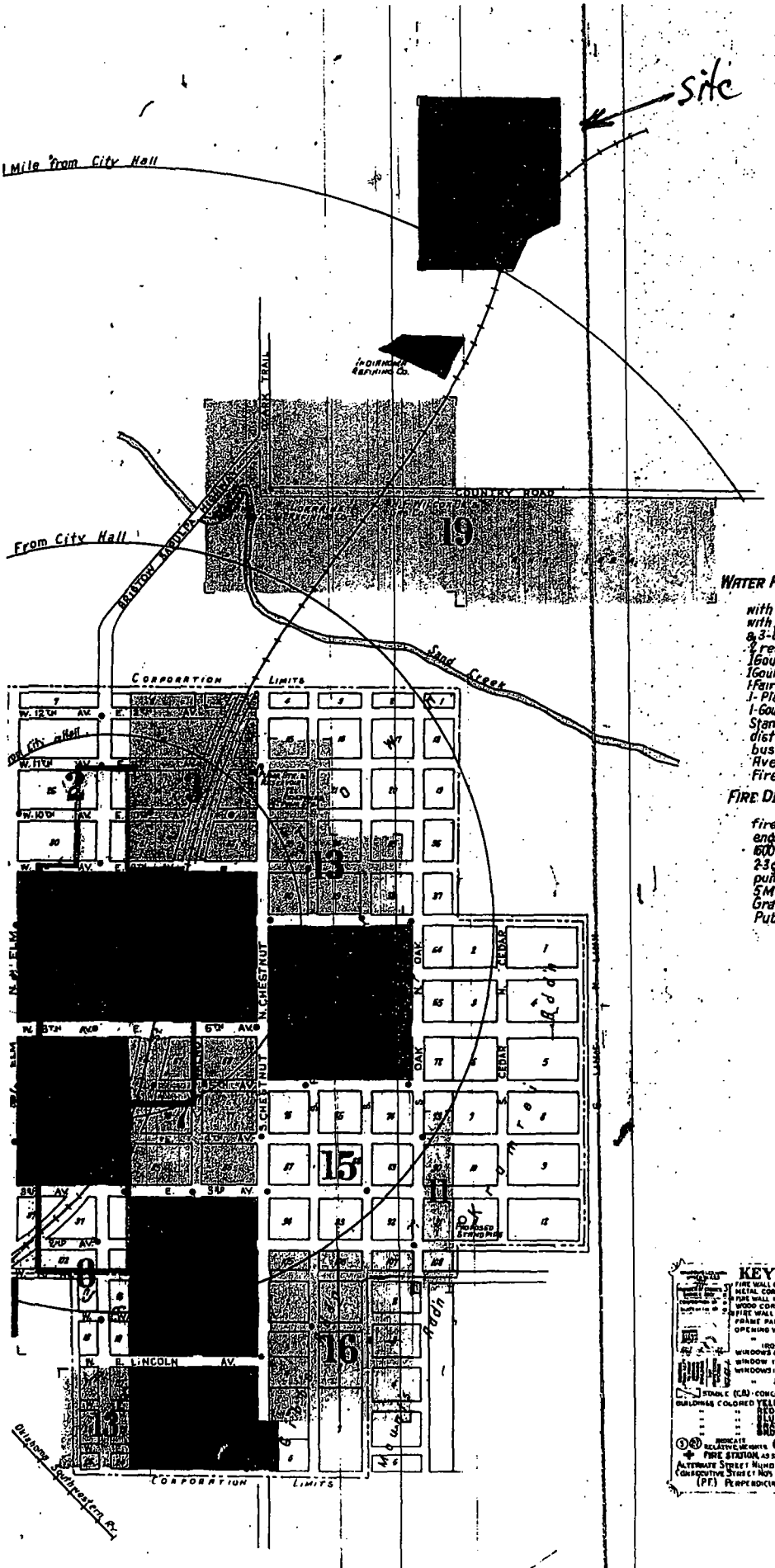
Owners	Code #	Address
(b) (6)		

[redacted]

Falcon Oil Properties	024-17	Box 988 Bristow OK 74010
Falcon Oil Properties	024-16	Box 988 Bristow OK 74010
U.S. Cellular Telephone Corp.	013-01	P.O. Box 31369 Chicago IL 60631

[redacted]

The Sanborn Fire Insurance Maps, records from Creek County Clerk's office, and the sketch which shows the current ownership are attached to this memorandum.



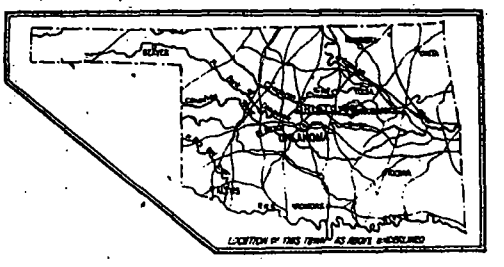
WATER FACILITIES:

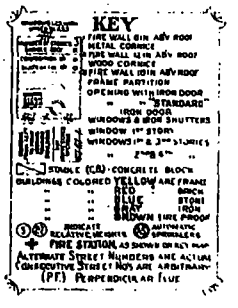
Municipal owned. Water from One 18" & two 8" deep wells with deep well pumps operated by oil engs. Three 15¼" deep wells with pumps operated by elec. motors also 3-8" deep wells with air lifts & 3-8" deep wells with steam lifts. Gravity & direct pressure system. 2 reservoirs capcy 35,000 gals. each & 1 reservoir capcy 250,000 gals. 1 Gould centrifugal pump capcy 1000 g.p.m. electrically driven. 1 Gould centrifugal pump capcy 300 g.p.m. electrically driven. 1 Fairbanks Morse pump size 6"x12 capcy 600 g.p.m. steam driven. 1- Platt pump size 8½"x10 capcy 300 g.p.m. electrically driven. 1-Gould emergency pump capcy 100 g.p.m. gasol. eng. driven. Standpipe capcy, 84,000 gals. 110 high with base elevd 30' above business district also proposed W.T. capcy 100,000 gals with base elevd 120' above business' section. About ten miles of water pipe. 62 double hydrants. Average daily consumption 600,000 gals. Domestic pressure 60 lbs. Fire pressure 100 lbs. at corner 6TH & Main.

FIRE DEPT:

16 members in volunteer dept. 1-chief partly paid. One man at fire station at all times. 1 American La France Auto combination chem. eng. & hose cart (to be equipped with 750 g.p.m. pumper). 600-2½" c.r.i. hose. 1-50 gal. chemical with 200 rubber hose. 2-3 gal. chemicals, 3-12' ladders. Fire alarm, telephone & whistle at pump sta.

5 Miles of paved streets.
Grades: Nearly level.
Public lights: elec.





OKLA . . 508

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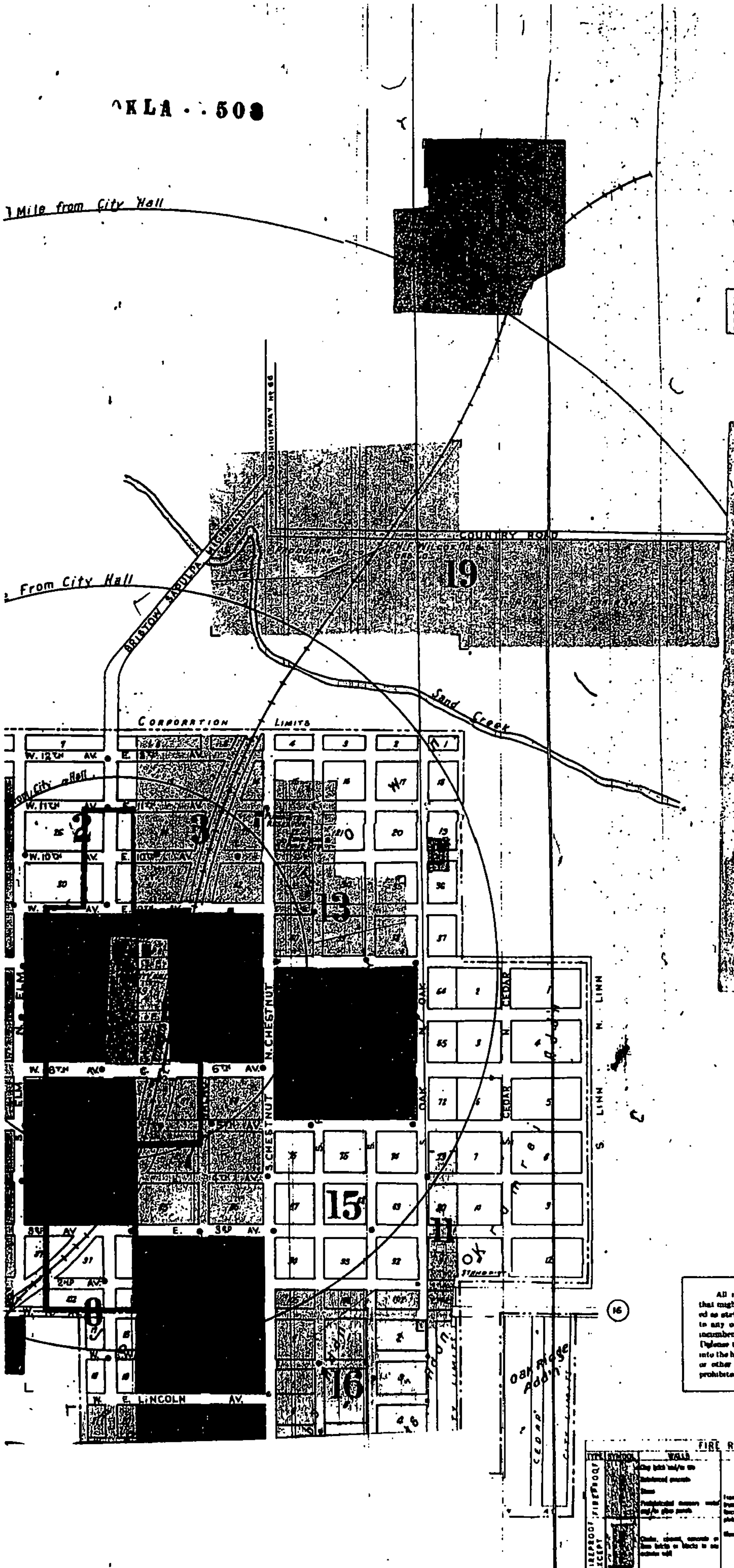
FOR WATER FACILITIES AND FIRE DEPARTMENT, SEE REPORT

BRISTOW

CREEK COUNTY
OKLAHOMA
OCTOBER, 1923



Note: Paste over New Report of Nov., 1954, which is now void.

Bristow, Okla.

BRISTOW

CREEK COUNTY, OKLAHOMA

NEW REPORT, APRIL, 1961

CITY IN GENERAL

POPULATION: 4,795 (1960 U.S. Census).

METEOROLOGY: Prevailing winds S. W. Extended periods of hot & dry weather. Moderate winter temperatures with little snow & occasional tornadoes in the district.

TOPOGRAPHY: Generally level.

STREETS: Approximately 40% streets unimproved.

FIRE FIGHTING FACILITIES

WATER SUPPLY: Municipally owned. Gravity & direct pressure system with supply from wells. Total pumping capacity 3,000,000 G. P. D. Total storage capacity 100,000 gallons.

Pressures range from 60 to 80 lbs. with an average of 70 lbs.

Average daily consumption 1,000,000 gallons.

FIRE DEPT.: Partly paid with 1 chief & 13 firemen. 1 station.

3 combination pumper, hose and booster trucks.

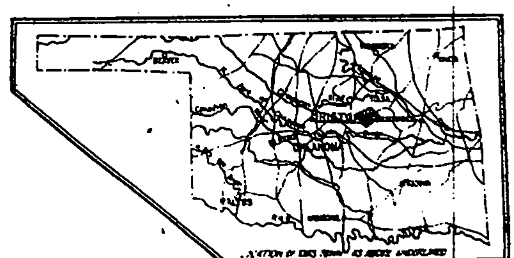
FIRE ALARM: Telephone & siren.

STRUCTURAL REGULATIONS

ROOFING: None.

FIRE LIMITS: Frame construction restricted within limits as shown on key map.

C-889



FIRE RESISTIVE CONSTRUCTION

TYPE	SYMBOL	WALLS	FRAMING	FLOORS	ROOF
FIREPROOF		[illegible]	[illegible]	[illegible]	[illegible]
FIREPROOF EXCEPT		[illegible]	[illegible]	[illegible]	[illegible]